DNA Replication Licensing Factor MCM6 (MCM6) ELISA Kit for Rat

PRODUCT OVERVIEW

Product Name	DNA replication licensing factor MCM6, ELISA Kit
Full Product Name	Rat DNA replication licensing factor MCM6 (MCM6) ELISA Kit
Product Gene Name	MCM6 elisa kit
Product Synonym Names	MCG40308; Mis5; P105MCM; DNA replication licensing factor MCM6|MCM6 minichromosome maintenance deficient 6 (MIS5 homolog; S. pombe)|MIS5 homolog|minichromosome maintenance deficient (mis5; S. pombe)
Species Reactivity	Rat
Assay Type	Sandwich
Samples	Serum, Plasma, Other biological fluids
Specificity	This assay has high sensitivity and excellent specificity for detection of Rat MCM6. No significant cross-reactivity or interference between Rat MCM6 and analogues was observed.
Preparation and Storage	Store at 2-8 degree C.
Molecular Weight	57,370 Da
3D Structure	ModBase 3D Structure for Q62724
Sample Volume	1-200 uL
Precision	Intra-assay Precision (Precision within an assay) Three samples of known concentration were tested twenty times on one plate to assess intra-assay precision. Inter-assay Precision (Precision between assays) Three samples of known concentration were tested in forty separate assays to assess inter-assay precision. CV (%) = SD/meanX100 Intra-Assay: CV Inter-Assay: CV
Detection Wavelength	450 nm
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for MCM6 elisa kit	Principle of the Assay: This assay employs a two-site sandwich ELISA to quantitate MCM6 in samples. An antibody specific for MCM6 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyMCM6 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for MCM6 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of MCM6 bound in the initial step. The color development is stopped and the intensity of the color is measured.
Other Notes	Small volumes of MCM6 elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for MCM6 purchase	MBS285904 is a ready-to-use microwell, strip-or-full plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the DNA replication licensing factor MCM6, ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing MCM6. The ELISA analytical biochemical technique of the MBS285904 kit is based on MCM6 antibody-MCM6 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect MCM6 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, MCM6. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for MCM6. It may not necessarily be applicable to this product.

NCBI GI #	6016535
NCBI GeneID	29685
NCBI Accession #	Q62724.2
UniProt Primary Accession #	Q62724
UniProt Related Accession #	Q62724
NCBI Official Full Name	DNA replication licensing factor MCM6
NCBI Official Synonym Full Names	minichromosome maintenance complex component 6
NCBI Official Symbol	Mcm6
NCBI Official Synonym Symbols	Mcmd6
UniProt Protein Name	DNA replication licensing factor MCM6
UniProt Synonym Protein Names	Intestinal DNA replication protein
Protein Family	DNA replication licensing factor
UniProt Gene Name	Mcm6
UniProt Synonym Gene Names	Mcmd6
NCBI Protein Information	DNA replication licensing factor MCM6
NCBI Summary for MCM6	belongs to a family of early S-phase proteins required for DNA replication; may play a role in cell-cycle progression and DNA replication [RGD, Feb 2006]
UniProt Comments for MCM6	MCM6: Acts as component of the MCM2-7 complex (MCM complex) which is the putative replicative helicase essential for 'once per cell cycle' DNA replication initiation and elongation in eukaryotic cells. The active ATPase sites in the MCM2-7 ring are formed through the interaction surfaces of two neighboring subunits such that a critical structure of a conserved arginine finger motif is provided in trans relative to the ATP-binding site of the Walker A box of the adjacent subunit. The six ATPase active sites, however, are likely to contribute differentially to the complex helicase activity. Belongs to the MCM family. Protein type: Cell cycle regulation; EC 3.6.4.12 Chromosomal Location of Human Ortholog: 13q13 Cellular Component: MCM complex; nuclear chromosome, telomeric region; nucleoplasm; nucleus Molecular Function: ATP binding; ATP-dependent DNA helicase activity; DNA binding; DNA helicase activity; helicase activity; identical protein binding; single-stranded DNA binding Biological Process: DNA replication initiation; DNA unwinding during replication
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

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